

PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF AGRICULTURE
(LIVE STOCK BRANCH)

BOYS' AND GIRLS' COMPETITIONS

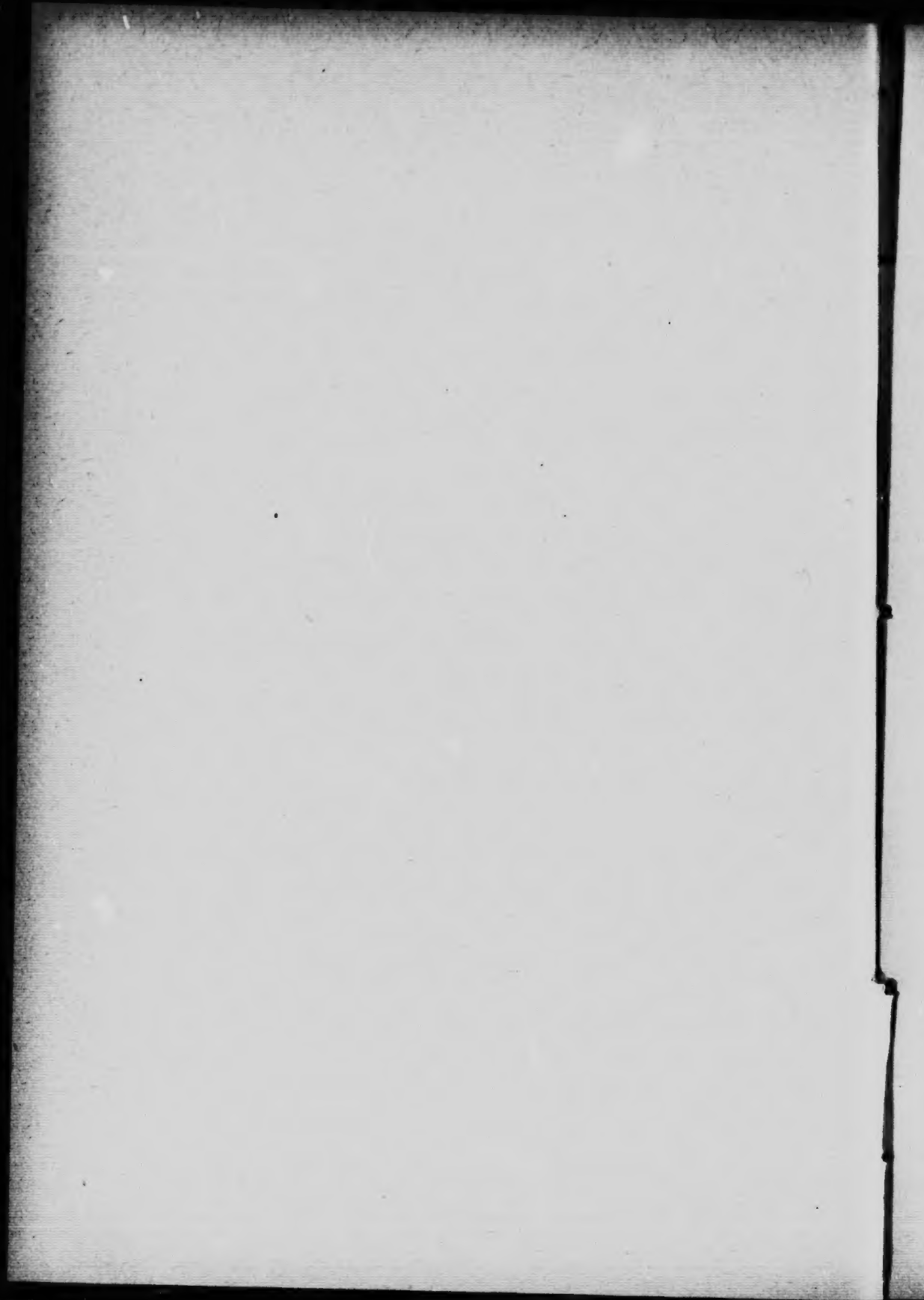
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DEPARTMENT OF AGRICULTURE,

VICTORIA, B.C., January, 1918.

To His Honour Sir FRANK STILLMAN BARNARD, K.C.M.G.,

Lieutenant-Governor of the Province of British Columbia.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for your approval Bulletin No. 78, entitled "Boys' and Girls' Competitions, 1918," which has been prepared by the Live Stock Branch under the direction of Mr. Wm. E. Scott, Deputy Minister of Agriculture.

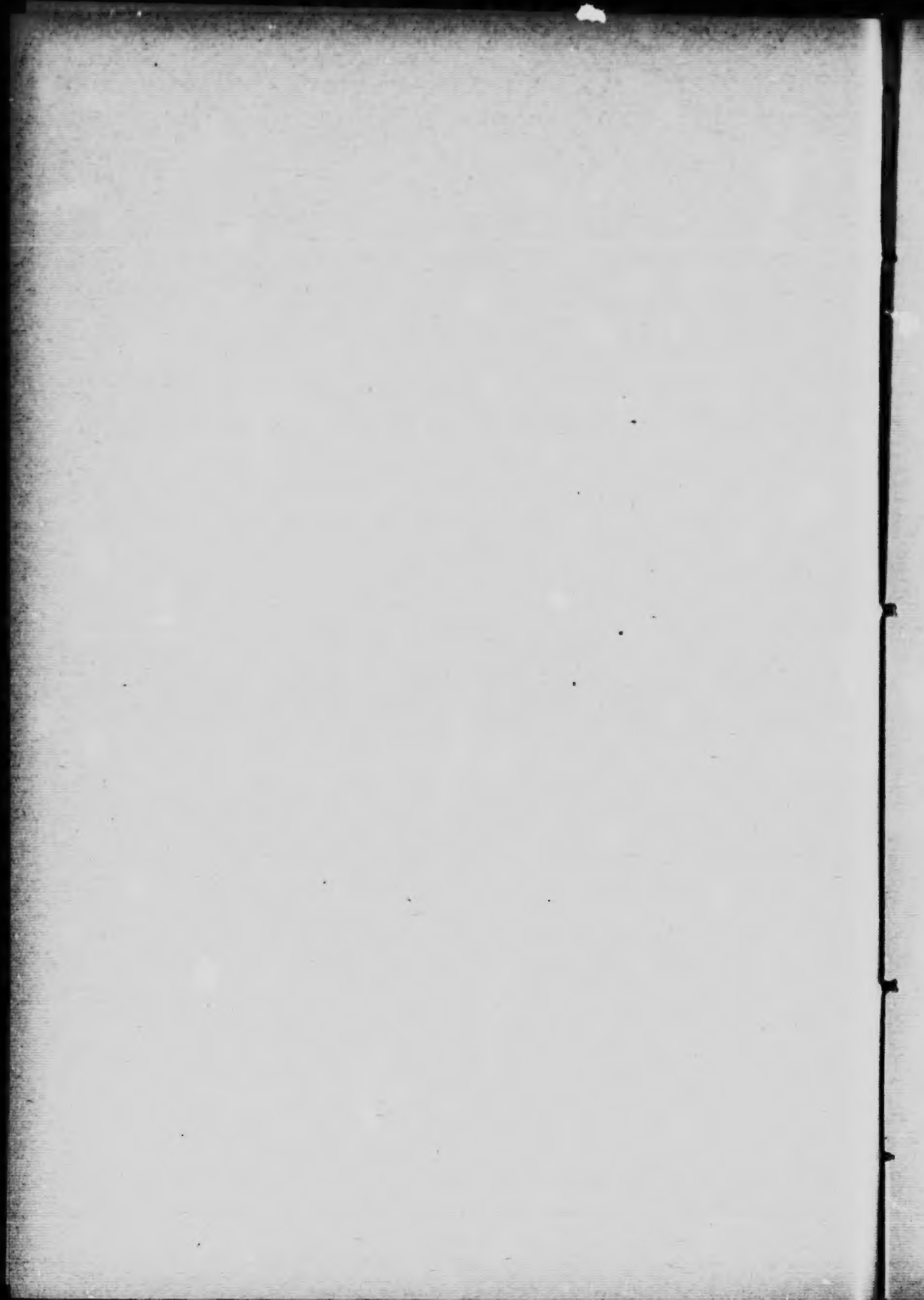
I have the honour to be,

Sir,

Your obedient servant,

JOHN OLIVER,

Minister of Agriculture.



DEPARTMENT OF AGRICULTURE,

VICTORIA, B.C., January, 1918.

Hon. John Oliver,

Minister of Agriculture.

SIR,—I have the honour to submit herewith for your approval Bulletin No. 78, prepared by the Live Stock Branch, being the Rules and Regulations governing the Boys' and Girls' Competitions for 1918, and the awards in these competitions for the past year.

I have the honour to be,

Sir,

Your obedient servant,

WM. E. SCOTT,

Deputy Minister of Agriculture.

PROVINCE OF BRITISH COLUMBIA.

DEPARTMENT OF AGRICULTURE (LIVE STOCK BRANCH).

HON. JOHN OLIVER,
Minister of Agriculture.

WM. E. SCOTT,
Deputy Minister of Agriculture.

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Live Stock Commissioner.

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Veterinary Inspector.

B. R. ILSLEY, V.S.,
Veterinary Inspector.

WM. J. BONAVIA,
Secretary to the Department.

* Granted leave of absence for overseas service.

BOYS' AND GIRLS' COMPETITIONS, 1918.

BY W. T. McDONALD, SUPERINTENDENT OF BOYS' AND GIRLS' CLUBS.

INTRODUCTION.

PRODUCTION and economy are the watchwords of to-day, and rapidly we are coming to a full realization of the important place held by agriculture. No matter how brave or well equipped the men in our armies may be, it is absolutely essential that they have a sufficient supply of food. We at home have not fully realized the seriousness of the food situation, but we know that when it is pointed out to our boys and girls they will willingly respond by their efforts to do their share. Our Boys' and Girls' Clubs become a medium through which information may be secured, and the work done by each individual member in the competitions counts for more than we at first realize. It is by each one doing his or her part that efficient results as a whole are accomplished. Our Boys' and Girls' Competitions were begun in 1914, and since that time very satisfactory results have been obtained.

ORGANIZATION.

Boys' and Girls' Clubs may be organized in any district under the supervision of the local Farmers' or Women's Institute, the Agricultural Society, or under the direction of any interested person. The splendid success which has attended the organization of Boys' and Girls' Clubs here and elsewhere has been largely due to the co-operation of business-men in the rural towns, farmers' organizations of various kinds, and more particularly to the encouragement given by the farmers themselves and other public-spirited men and women in the community. More than ever before does this work justify hearty support, and we are sure that the same will be accorded to the movement.

RULES AND REGULATIONS GOVERNING ORGANIZATION AND MEMBERSHIP.

1. Any boy or girl eleven years old and under eighteen years of age shall be eligible for membership.
2. Any district wishing to form a Boys' and Girls' Club must secure at least eight active members before such organization will be recognized.
3. A membership fee of 25 cents shall be charged, and paid to the Club Secretary, to ensure goodwill and cover postage on correspondence which the Secretary will have with the Superintendent and others.
4. The officers shall consist of:—
 - (a.) Club Organizer;
 - (b.) President;
 - (c.) Secretary-Treasurer.
5. The Club Organizer shall be an Honorary Secretary and assist in the conducting of the business of the club.
6. The President and Secretary of the Boys' and Girls' Club shall be elected by the members from among their number, and with the Club Organizer shall compose the Executive Committee which will direct the affairs of the club.
7. The Secretary-Treasurer of the Boys' and Girls' Club shall forward as soon as possible after organization an application for enrolment, together with a list of the officers and members, with post-office address of each, to W. T. McDonald, Superintendent of Boys' and Girls' Clubs, Department of Agriculture, Victoria, B.C.

8. The Secretary-Treasurer shall submit to the Superintendent of Boys' and Girls' Clubs from time to time a report on the progress of the affairs of the club and the competitions conducted.

NOTE.—Application forms for the enrolment of each club formed will be forwarded on request.

COMPETITIONS.

Each Boys' and Girls' Club will select from the following list the competition or competitions which it elects to conduct during the coming summer:—

- (1.) Pig-raising Competition (individual):
- (2.) Pig-raising Competition (sow and litter):
- (3.) Calf-raising Competition:
- (4.) Poultry-raising Competition:
- (5.) Canning Competition:
- (6.) Potato-growing Competition:
- (7.) Corn-growing Competition.

GENERAL REGULATIONS GOVERNING ALL COMPETITIONS.

1. Any Boys' and Girls' Club electing to conduct a competition in one of the above classes must make application to the Superintendent of Boys' and Girls' Clubs before May 15th, 1918.

2. Any Boys' and Girls' Club desiring to conduct a competition in one of the above classes must have at least eight entries.

3. Any Boys' and Girls' Club desiring to conduct competitions in two of the above classes may do so, subject to the following rules:—

- (a.) There must be at least eight entries in each competition:
- (b.) No member can take part in more than one competition during any one year except by special arrangement with the Superintendent of Boys' and Girls' Clubs.
4. (a.) Plots entered in Classes 5 and 6 must be exactly $\frac{1}{10}$ acre in size (16 square rods, 480 square yards, or 4,356 square feet). A margin of $1\frac{1}{2}$ feet should be allowed around the plot, and should not be included in the $\frac{1}{10}$ acre.
- (b.) A disinterested person shall be appointed by the executive of the club, who shall be present at the measuring of all plots, the sorting and weighing of the crops, and who shall sign the financial statement, certifying that it is correct.
- (c.) Blank forms shall be supplied by the Department for this purpose.
- (d.) Each competitor must do all the work himself or herself, except that the girls or younger boys may be assisted with heavy work, such as ploughing.
- (e.) Scale of charges to be used by all competitors:—

Rent of land	\$10 per acre.
Each horse	20 cents per hour.
Each man	30 cents per hour.
Each boy or girl	15 cents per hour.
Stable manure	\$2 per two-horse load delivered on the land.
Each irrigation	20 cents.

NOTE.—Give the lowest cost of fertilizer other than stable manure, seed, spray material, lumber, fencing, etc.

5. An actual financial statement showing expenses, rentals, and profits shall be made by each competitor. This statement must include such items as rent of land, cost of labour, seed, manure, spraying, feed, lumber, fencing, etc. Reports must reach the Superintendent of Boys' and Girls' Clubs not later than November 15th, 1918.

6. Where possible, the judge will notify the boys and girls of the date of his visit, and would be pleased to meet and talk with them at that time.

7. The Department of Agriculture will supply a small note-book to each competitor, in which the competitor may keep a record of work done, feed fed, and money paid out for the various expenses. This note-book will be of inestimable value in making report and writing the essay. The note-book must be produced upon the request of the judge at the time of his midsummer visit.

PRIZES AND FAIRS.

As an incentive for the stimulation of greater interest on the part of all competitors, the Department of Agriculture will, in addition to sending judges to score the plots and exhibits at the fairs and at the homes of the competitors, offer cash prizes to local winners and sweepstakes prizes to Provincial winners. While the cash prizes are well worth striving for, the honour of winning a prize will really be of greater value; and, further, the application necessary to win the prize will result in the gaining of knowledge and experience that will prove a great asset. The winners of the district prizes in all excepting the canning competitions will be decided on a basis of four scores:—

(1.) A midsummer score based on the manner in which the competitor is carrying on his or her work.

(2.) A final score at the conclusion of the competition. Exhibits will be judged at local fairs where such are held; otherwise special arrangements will be made.

(3.) A score based on the financial report. This report shall be made on form supplied by the Department for the purpose.

(4.) A score based on an essay entitled "How I raised my Exhibit." This essay shall not exceed 200 words in length, and shall be written by the competitor from his or her own experience in the competition for the present year.

If for any reason less than eight competitors in a competition complete the work required, only three prizes will be awarded.

In Classes 1, 2, and 3 the prizes for local competitions are as follows:—

First prize	\$8 00
Second prize	6 50
Third prize	5 00
Fourth prize	3 50

In Classes 4, 5, 6, and 7 the prizes offered for local competitions shall be as follows:—

First prize	\$5 00
Second prize	4 00
Third prize	3 00
Fourth prize	2 00

PROVINCIAL PRIZES.

In addition to the prizes offered for local competitions, Provincial sweepstakes prizes will be awarded to the boy or girl scoring the highest number of points in each group of competitions organized, provided there are at least five competitions in that group. Each winner of a Provincial prize will receive his or her choice of one of the following:—

- (1.) A pure-bred pig of breed chosen by the winner;
- (2.) A pen of pure-bred chickens of breed chosen by the winner;
- (3.) A special set of agricultural reference books;
- (4.) A special set of home economics reference books.

PROVINCIAL CLUB PRIZE.

The Boys' and Girls' Club organizing and conducting the most successful competition or competitions, judged according to total number of competitors, financial

reports, and essays, will receive from the Department of Agriculture a library consisting of eight of the best agricultural periodicals published at the present time. These periodicals shall be circulated among the members of the club.

PROVINCIAL SEED FAIR.

Special prizes are offered for potatoes and corn grown and exhibited by a member of a Boys' and Girls' Club, as follows:—

20 lb. of potatoes—

First prize	\$10 00
Second prize	8 00
Third prize	5 00

12 ears of corn for seed—

First prize	\$10 00
Second prize ...	8 00
Third prize	5 00

These exhibits are to be sent to the nearest Seed Fair. Notice of the points at which Provincial Seed Fairs are to be held will be announced soon after October 1st, 1918.

COMPETITIONS.

No. 1. PIG-RAISING.

SPECIAL RULES AND REGULATIONS.

1. Any Boys' and Girls' Club desiring to organize a Pig-raising Competition should first ascertain whether the initial cost of young pigs will admit all members desiring to enter.
2. All pigs entered in a Pig-raising Competition should be less than two months old at the inauguration of the competition.
3. Competitors must take charge of the feeding of the pig chosen as soon as possible after weaning-time.
4. It is desirable, but not necessary, that all pigs in any competition be of the same breed and age.
5. A detailed record (by weight or measure) of all feed fed to the young pig from weaning-time until the pig has attained a weight of about 200 lb. should be kept. Also a record of the acreage of pasture necessary for one pig.

INSTRUCTIONS FOR RAISING PIGS.

Selection of the Pig.—When you are selecting the pig you intend to raise in competition with the other club members of your district you should exercise considerable care. The "breed" does not matter as much as the "strain." There are good and poor pigs of every breed and in most litters. Endeavour to pick the best pig in the litter for your entry in this competition. Watch the pigs before they are weaned and notice which pig is always hungry, always looks thrifty and healthy. Select the pig from parents of the right type.

Housing the Young Pig.—Take the pig you have selected away from its brothers and sisters and put it in a pen by itself. If there is not a good clean pen available in the barn, make one. The best kind of a pen for the young pig is a portable pen, made with a few poles and a board or two which will keep other animals out and keep the pig in. Supply a box with some nice clean straw or hay in which the pig may sleep. The best place for the pen is out on the grass, where the little pig can eat grass and enjoy the fresh air and sunshine. Always remember that pigs are no dirtier than you force them to be. Keep your pig clean.

Feeding the Little Pig.—Do not let any one feed the pig except yourself. Feed the pig three times a day, regularly, but not oftener. Do not feed it too much. Commence by feeding it a very little. If it eats all that you have given it, increase the amount slightly the next feed. Feed it in a clean trough, and if you find that

It has not eaten all the feed given inside of one-half hour, remove the trough and the feed. Give the feed to the other pigs or chickens, but do not put the same feed before the pig twice. It may have become sour in the meantime. Be sure that the trough is clean before placing feed in it.

Ration advised for the Pig.—The nature of the feed fed the pig will depend entirely upon the available supply. The pig needs three kinds of feed:—

- (1.) Feed to build up the bones;
- (2.) Feed to build up muscles; and
- (3.) Feed from which to manufacture fat and warmth.

While the pig is small it depends entirely upon milk for its supply of each kind of food. Before weaning-time the young pigs should be fed a little warm skim-milk mixed with middlings, or finely ground oat-chop as a supplementary ration. After weaning, this same ration should be continued for a time, two or three weeks. The young pig may be fed a mixture of oat-chop and middlings mixed with warm milk or warm water. The ration may be gradually changed until the two-months-old pig receives soaked chop, etc., and green grass. This ration with a little variation from time to time should produce a good marketable pig in six months. Weigh the pig when you commence and each month thereafter. Determine the amount of weight gained per day. Don't forget that green feed keeps the pig healthy, and that alfalfa is one of the best of green feeds. Pasture is cheap; use all you can of it. It cuts the grain bill in two.

Exhibition.—Note that larger prizes are offered for pig-raising than for any of the other competitions.

NOTES.—(a.) Treat the pig fairly; do not maltreat and the pig will not be hard to handle at any time.

(b.) You can never get anything for nothing. If you don't try hard, your pig won't look very good at any time.

(c.) For other information concerning "Hog-raising in British Columbia" write in for Bulletin No. 60.

NO. 2. PIG-RAISING (SOW AND LITTER).

1. All competitors shall have charge of the care and feeding of the brood sow, starting with a period not less than two weeks before the time of farrowing.

2. A record shall be kept of the number of pigs farrowed, the sex of each pig, and the number of pigs raised.

3. Records shall be kept of the feed fed to the brood sow prior to time of farrowing, and a record of the feed fed from the time of farrowing to the time the pigs are weaned.

4. A record shall be kept of all feed consumed by the litter from the time they are weaned until they are ready for market.

5. Should the sow be retained for breeding purposes, a record shall be kept of feed fed from the time the pigs are weaned until the close of the competition.

NOTE.—For detailed instructions write to the Superintendent of Boys' and Girls' Clubs for Bulletin No. 60, entitled "Hog-raising in British Columbia."

NO. 3. CALF-RAISING.

SPECIAL RULES AND REGULATIONS.

A club may choose to raise calves of either of the two types, dairy or beef, but all the competitors in one club must raise the same type of calf.

Grade heifer or steer calves may be entered for competition, but all bull calves entered must be pure-bred.

All the calves in one competition must be as near the same age as possible.

Competitors should take entire charge of the feeding of their calves as soon after birth as possible. All calves must be hand-fed.

Competitors must keep an accurate account of all milk, grain, and fodder supplied. This is for the report and essay to be written at the end of the contest.

Detailed instructions are given below for raising a dairy calf. The method for raising a beef calf by hand is the same, except that whole milk may be fed for a longer period, and perhaps more grain allowed.

INSTRUCTIONS FOR RAISING THE DAIRY CALF.

Whether the young calf is taken away from its mother at once or not, it must get its own mother's milk at first. This yellow first milk contains substances, absent from the milk later, which are essential to the digestive organs of the new-born calf, acting as a physic and stimulant.

The calf's stomach is small and there is danger of overfeeding. For the first two weeks 4 or 5 quarts or about 10 or 12 lb. per day is all a large calf should have. A small calf, as a Jersey, does not need more than 8 or 10 lb. per day at the start. This amount may be fed in two feeds per day, or, better, in three for the first two or three weeks, starting with the smaller quantity and increasing by 2 lb. the second week. For the first two or three weeks whole milk should be fed, but it is not essential after the first few days to feed the calf its own mother's milk. In the case of Jerseys and Guernseys giving very rich milk, it is better to dilute the whole milk with skim-milk right from the start, as the fat is hard to digest. After two or three weeks skim-milk is substituted more and more at each feed. The change to a skim-milk diet should be made gradually and take about a week to accomplish. It is a mistake to suddenly increase the amount of milk fed when changing to skim-milk, with the idea that the calf needs a great deal more of skim-milk than whole milk. The increase should be gradual as the calf grows older, and seldom more than 20 lb. (2 gallons) daily need be fed even a large calf at any time. A good rule is to always keep the calf a little hungry. We have to remember that in the natural or wild state the milk-supply for the young is much less than under our artificial conditions.

SUPPLEMENTS TO SKIM-MILK.

At three weeks, or about the time the change is made from whole to skim milk, grain feeding should commence. Some prefer to mix the supplementary feed with the skim-milk the first two or three weeks, using at each feed two tablespoonfuls of boiled feed-flour, rolled oats, or flax-seed jelly made by pouring boiling water on flax-seed. After five weeks of age the grain is best fed dry after the milk, and most feeders feed the supplement separately from the beginning. If the calf will not begin to eat, a little grain may be rubbed on its muzzle, and it will soon learn to seek the trough. For the first few days grain should be kept before the calf all the time. After it has commenced eating it should get only what it will eat at each meal. Grain should not be left in the trough to sour. At six weeks old about $\frac{1}{2}$ lb. of grain a day will be eaten; at the end of two months 1 lb. a day; and at three months and later about 2 lb. per day is enough.

Some suitable grain mixtures are as follows:—

- (1.) Oats, 4 parts; bran, 2 parts; linseed-oil meal, 1 part.
- (2.) Oats, 2 parts; corn, 1 part.
- (3.) Oats, 5 lb.; bran, 3 lb.; corn-meal, 1 lb.; linseed-meal, 1 lb.
- (4.) Oats, ground barley, and bran.

There is little danger of the calf fed skim-milk eating too much grain. Liberal feeding pays in the case of all young growing animals. The calf is possessed of a good set of grinders and can digest whole oats very well.

ROUGHAGE FOR CALVES.

Calves will begin to eat hay as soon as they will eat grain. The hay should be of good quality. In summer they can be turned out to pasture to get what roughage

they need, provided the change is made gradually. There is danger of scours when put on pasture suddenly. If shade from the hot sun is not available, they will do better inside eating hay or soiling crops up to six months of age. Corn silage and roots are also good feeds for calves.

TO TEACH A CALF TO DRINK.

Two fingers are inserted in the calf's mouth, and he at once commences sucking. The muzzle is then forced into the milk-pail, so that the milk is sucked in between the fingers. He should not have the fingers more than two or three times, or he will always look for them and be troublesome to feed.

POINTS IN FEEDING CALVES.

Each calf must get its share, and no more. Feeding a bunch of calves out of one trough at the same time will not do. The milk must be warm and sweet. We have to imitate nature and feed the milk at blood-heat, which is 100° Fahr. This point is important. When the calf is young its digestion is easily upset, and a thermometer should be used to eliminate guesswork.

During cool weather it will be necessary to heat the skim-milk after passing through the separator before it is fed to young calves. Otherwise scours or other digestive troubles are sure to occur.

Feeding-pails must be kept as clean and sweet as the milk-pails, and scalded as regularly, or trouble will follow.

WATER, SALT, AND MINERAL MATTER.

A supply of clean water and salt should be handy all the time. A calf needs a drink of water often in hot weather, as well as its milk. Some calves suffer from want of minerals in the ration and will be benefited by feeding daily $\frac{1}{2}$ oz. of chalk or ground rock phosphate. A little blood-meal in the milk will help ailing calves.

Send to the Publications Branch, Department of Agriculture, for Bulletin 67 on "Dairy Cattle." It tells, among other things, how to treat calves when they get sick.

NO. 4. POULTRY-RAISING.

SPECIAL RULES AND REGULATIONS.

1. Competitions in poultry-raising may be conducted with poultry of the following breeds: Barred Plymouth Rocks, White Wyandottes, White Leghorns, Buff Orpingtons, or Rhode Island Reds.

2. All competitors in any club district must raise chickens of the same breed; such breed to be designated when entry is made.

3. Should any club find difficulty in securing eggs of the desired breed for the competitors, the Department of Agriculture will supply thirteen eggs of the desired breed to each competitor at 50 cents per setting, money to accompany application.

4. The eggs must be set under a hen, and not more and not less than thirteen eggs shall be set.

5. All the eggs should be tested at least once during the hatch, usually on the ninth day, and the number of fertile and infertile reported. (Method of testing to be followed is given under "Instructions.")

6. A Hatching Record Form will be provided. This must be filled out and submitted to the Superintendent as soon as the chicks are hatched.

7. The essay must contain an account of the handling of the setting hen, how the chicks were raised, etc., and must not exceed 200 words in length.

INSTRUCTIONS FOR POULTRY-RAISING.

Handling the Setting Hen.—Take a box, not less than 14 inches square and as deep as possible, put a few inches of earth in it, and bank up the corners with earth

to keep the eggs from rolling out of the nest. Then cover it with some cut, soft straw, chaff, or hay. Put the box in a room or shed where the hen will not be disturbed by other hens or marauding animals. The hen should have plenty of room to exercise when off eggs, and the room should be well lighted. An opening on the north side will be excellent. Select a hen with as bare a breast as possible, and one that has been broody for a few days. Hens are better than pullets as settlers. Dust her thoroughly with insect-powder, and remove her to the box after dark. Some china or other eggs should be warmed and placed under her at first. Drop a box or a basket over the front of the box to make it dark; leave her alone for a day, and then, if she is setting quietly, place the setting of good eggs under her. Provide clean grain (whole corn or wheat), pure water, and, if possible, a pan of buttermilk, and some earth in a shallow box for her to dust in. A sod of fresh spring grass should be given every few days. Watch her closely to see whether or not she comes off the nest to feed regularly, and whether she goes back promptly to the eggs. If she does not, train her by taking her off the eggs regularly each morning, and after she has fed for half an hour, see that she goes back to her nest. After a few days she will adopt the proper habit. Should any eggs be broken and the other eggs get dirty, wash them carefully in lukewarm water. They should be properly dried, and the hen's breast and feathers dried also, if found wet.

Testing the Eggs.—The eggs can be tested on the ninth day. White eggs can be tested sooner than brown. Use an ordinary lamp. Place a piece of tin or cardboard in front of the lamp with a small opening about 1 inch across directly in front of the flame. By holding an egg up to this opening you may examine its condition. The fertile egg will have quite a large air-space at its larger end and the remainder of the egg will be dark. You may also see red blood-veins in the egg. An infertile egg will appear almost clear, not so dark as the fertile, and has a smaller air-space than the fertile egg. All doubtful eggs should be left under the hens, first making a ring around each with a pencil. When testing, do not shake or jar the eggs; neither hold them too long against the heat of the lamp.

Feeding and raising Chickens.—The hen should be left with the chicks in the nest till they are at least a day old. Dust the hen with insect-powder before putting her into the coop with the chicks. Feed the very young chicks on a mixture of ground bread-crumbs, hard-boiled egg (shell included), and an onion. The onion will supply moisture. After a day or two give them cracked wheat, rolled oats, pinhead oatmeal, or commercial chick-food. Give them milk (skim or butter) to drink if you have it. Feed them at least five times a day at first. Move the coop every few days. It is better to keep them on short grass run till the dew is off in the mornings. Make the coop tight and safe from visiting animals, and also place in shade if weather is hot. Feed the chicks on dry mash placed in a small pan or on a shingle. The dry mash can be made of finely ground barley and oats, bran, middlings, or shorts. A burnt or charred stick will provide charcoal for them to pick. Supply plenty of grit and fine gravel, also clay or oyster shell. Feed them on whole grain when they are about six weeks old. Give them as much variety in their food as possible, and don't forget to give them plenty of sour skim-milk or buttermilk. Keep them healthy and in good growing condition by allowing them free range. The more room the better. Keep your coops clean and dry.

Exhibition.—In exhibiting the fowls, the shanks and toes should be washed clean, and the comb and wattles also washed and wiped dry. The fowls should be cooped in a roomy crate at least three days before the show, to get them tame.

NOTE.—Keep careful records of all feed fed, either by weight or measure. Don't forget that chickens need green feed, and that green feed is cheap.

NO. 5. CANNING.

1. Fruit and vegetables shall be canned in pint jars.
2. Each competitor shall select the varieties of fruits and vegetables to be canned.

3. The exhibit shall consist of twenty jars.
4. The score will be based on:—
 - (a.) Method of canning;
 - (b.) Variety of fruits and vegetables;
 - (c.) Economy of canning;
 - (d.) Essay.
5. Each competitor shall write an essay, the length of which shall be determined by the writer, describing fully the method of selecting the product used and the process of canning in each case.

NO. 6. POTATO-GROWING.

SPECIAL RULES AND REGULATIONS.

1. All competitors within the same club district must use the same variety of potato. The variety to be decided by a vote of the competitors. Great care should be exercised in the selection of the variety. A standard variety should be chosen in preference to any new variety, and the practice of seed-selection adopted.
2. The Department recommends the Burbank, Carmen No. 1, and Gold Coin as standard varieties. One or two other varieties have proven themselves adapted to local conditions in certain districts.
3. The midsummer score will be based more especially on freedom from weeds, care, and management than on high yield, etc.
4. In filing list of entries with the Superintendent of Boys' and Girls' Clubs the name of the variety of potatoes to be grown must be stated.

INSTRUCTIONS FOR POTATO-GROWING.

(1.) *Selection of a Plot.*—Almost any kind of soil, from a light sandy loam to a well-drained stiff clay, will grow good potatoes. Avoid a heavy, wet, or cold soil. A piece of clover-sod ploughed deeply and well worked gives satisfactory results. Do not select a plot where potatoes have grown the previous year, and thus avoid the danger of scab and other diseases left by last year's crop. Choose a location for the plot near the house, so that any spare moments may be devoted to its care without wasting too much time going and coming.

(2.) *Preparation of the Plot.*—Prepare the soil well to make a mellow and fertile seed-bed. Treat the land with well-rotted barnyard manure; plough deeply and then harrow it until a good deep, fine seed-bed free from trash is made. A damp soil, naturally cold, should be ploughed some time prior to the time of planting to allow it to become warm. This cultivation will provide just what the potato needs for a good start, and a good start is half the race.

(3.) *Selecting the Seed-potatoes.*—Plant only good, healthy, well-shaped potatoes of the variety chosen. The slightly flattened, oval-shaped, shallow-eyed potato is preferred; although in some districts the use of the long Burbank is advised. A good seed-potato may be described as follows: Medium size; eyes strong, shallow, and well distributed; skin fairly thin, clear, brown to white colour, and free from scabs; flesh clear, without dark rings or spots; weight about 10 oz.

Treating the Seed.—To prevent the potatoes from being scabby, immerse the seed for two hours in formalin and water, 1 oz. of formalin to 2 gallons of water. Spread the potatoes out to dry after treatment before planting. Potatoes should not be sown two years in succession on the same ground, because potato-diseases may be carried over in the soil and effect the new crop.

Cutting the Seed.—The best size of seed-piece cuttings is a question that has not been definitely settled. If the eyes are evenly distributed over the potato and not too numerous, the general practice adopted is to cut the seed so as to have two good eyes to each seed piece. If you are not planting the "sets" immediately after cutting, the cut surfaces should be sprinkled with lime to prevent their drying out.

Planting the Seed.—Potatoes should be planted from 3 to 5 inches deep, according to the nature of the seed-bed and climatic conditions. Potatoes should be planted in rows 36 inches apart and from 10 to 15 inches apart in the row. If the soil is porous and apt to dry out readily, do not hill up. If the soil is damp, poorly drained, and a little cold, hilling up may be necessary and is advised. It is usually advisable to plant potatoes between May 9th and 24th, but this will vary with local conditions.

Cultivation of Potato-crop.—The principal part of the cultivation should be done before the potatoes are planted. If the seed-bed is properly prepared, all the cultivation necessary afterward will be the hoeing of weeds and the stirring-up of the top layer of soil after each rain or irrigation. A garden-rake is a good tool for this latter operation. This raking breaks the baked mud crust which would otherwise form and assists the ground to hold the moisture necessary to grow the crop.

Spraying.—This should be practised in any district where "late blight" or "potato-beetles" have been noticed. For information on this write the Department of Agriculture, and they will forward a spray calendar and other available information.

Digging and Seed-selection.—These two operations are inseparable. During the growing season you will notice that some plants do better than others. Put a little stake beside each of those that do well. When digging-time arrives, watch the digging, and when taking up the best hills with the largest yield of clean, healthy potatoes of the type you wish to grow next year, work carefully, not to cut or bruise the seed, and store these in a cool, dry place where there will be no danger of frost.

At the same time select the potatoes for your harvested exhibit which is to be sent to the Provincial Seed Fair in December. The second score will be on these exhibits at the Seed Fair, so do not forget to send your selected 20-lb. lot at the proper time in December, which will be announced. (See paragraph under head of "Provincial Seed Fair.")

Put in the potatoes which are 2 inches or less in diameter in one pile and all the larger potatoes in another pile. Weigh each lot separately and classify them as "unmarketable" and "marketable" potatoes in making out your report.

Final Advice.—Do everything as nearly as possible at the proper time. If you get behind with your work you will find it hard to again catch up. The judge will be sure to arrive in your district just when you don't expect him, and think how badly you will feel if your plot does not look good, due to weeds you might have removed.

NO. 7. FODDER-CORN GROWING.

SPECIAL RULES AND REGULATIONS.

1. In districts where fodder corn may be ripened successfully the Department of Agriculture will supply 1 lb. of a pure strain of fodder corn to each competitor free of charge.

2. All competitors within any club district must grow the same variety of corn.

3. Clubs electing to conduct a Fodder-corn Competition should notify the Superintendent of Boys' and Girls' Clubs, Department of Agriculture, Victoria, B.C., as soon as possible, stating the variety which they wish to grow, thus enabling the Department to secure the best of seed for them.

4. Determine the weight of ears and stalks separately at the time of harvesting.

Selection of a Plot.—The selection of a plot is very important, since corn does not do well under certain soil conditions. Choose a plot which is well drained, has not been water-soaked all winter, and will become warm early in the spring. The soil must be quite warm before the corn will germinate. Do not select a stiff clay, since this will have a tendency to bake after every rain or irrigation, and will keep you working overtime to maintain a good surface mulch. Again, do not select a very sandy, porous soil unless you have plenty of rainfall or convenient irrigation.

pipes. Try and locate a plot near the buildings that will retain sufficient but not too much water, and which will "warm up" quickly under the rays of the spring sun.

Preparation of Seed-bed.—The preparation of the seed-bed for corn is very similar to the same operation in the growing of potatoes. Manure heavily, plough deeply, and harrow thoroughly.

Planting.—Plant the corn in hills 42 inches apart each way. Place from four to six kernels in each hill and cover with about $1\frac{1}{2}$ or 2 inches of soil. When the young plants attain a considerable size, thin out so as to have four plants per hill. The best time to plant varies with climatic conditions in the various districts. As a general rule, from May 10th to June 1st is the best time to plant corn. If there is comparatively little danger of spring frost, plant the corn as soon as the soil begins to get warm. If spring frosts are common, postpone the planting until a later date.

Cultivation.—If convenient, harrow the plot with a light drag-harrow once or twice before the corn is up. After the corn comes up, cultivate between the rows with a horse-cultivator at least once a week. If you have no horse-cultivator, use the wheel-hoe or any other instrument that will kill weeds and stir up the surface soil. Do not cultivate too deeply—2 inches is sufficient.

Cultivation, except to kill weeds or break up the surface crust after rains, should be discontinued after July 15th. Late cultivation tends to induce continued growth, which prevents the early maturing of the crop. The more nearly mature the corn has become when cut the larger will be the percentage of dry matter in the crop, and the more valuable it will be for fodder or silage.

Irrigation.—In districts where irrigation is necessary the greatest care should be exercised. Corn needs a lot of moisture, but the ground should not be soaked at any time. The number of irrigations and the time water is applied will be governed by the local rainfall and the nature of the soil. Do not allow the ground to bake after the irrigation; go between the rows and break up the crust formed by the addition of the surface water.

Harvesting and Storing.—The most approved method of storing fodder corn in this Province is in the silo. For junior competitors, however, who must allow the crop to mature to secure the ears for the Seed Fair, a different method must be adopted. Remove the ears as soon as they are mature, cut the stalks, tie up into sheaves, and stand these up in stooks. The sheaves may be held together by tying binder-twine around the upper part of the stook. Tie the ears together as shown in accompanying plate and hang up to dry in cool, dry place.

Weigh the yields of each, ears and stalks separately, and reckon from these the total yield per acre of each produced.

Feed a little of the fodder to the cattle and see whether or not they eat it with relish.

WINNERS IN BOYS' AND GIRLS' COMPETITIONS, 1917.

POULTRY COMPETITION.

ARROW LAKES CLUB.

Prize.	Points.
1. C. Hambling	271
2. Mary Kirk	260
3. H. Gardner	265
4. P. G. Rawlings	268

HERESFORD CLUB.

1. F. Barker	270
2. J. Haughton	263
3. J. Hutchinson	262
4. N. James	255

CASTLEDALE CLUB.

1. M. Gilbert	260
2. F. Gilbert	265
3. C. Gilbert	260
4. Nina Soles	240

CASTLEHAR CLUB.

1. R. Watts	260
2. L. Sommel	268
3. W. Pittaway	267
4. N. Defoe	254

COWICHAN CLUB.

1. V. Lamb	272
2. I. Sherman	260
3. M. Hopkins	266
4. E. Sherman	265

COURTENAY CLUB.

1. B. Duncan	260
2. H. Leighton	254
3. H. Towler	253
4. H. McQuillan	250

DENMAN ISLAND CLUB.

1. E. Chalmers	272
2. M. Dalziel	271
3. R. Balkie	258
4. H. Balkie	256

FORT GEORGE CLUB.

1. K. Brown	269
2. M. Braun	266
3. M. Manners	265
4. M. Hiller	223

FRUITVALE CLUB.

Place.	Points.
1. E. Garrard	273
2. O. Hearney	271
3. C. Wagner	269
4. T. Cole	268

NORTH KAMLOOPS CLUB.

1. H. Emerich	269
2. C. Mottley	262
3. K. Reamsbottom	256
4. E. Mottley	252

K*LOWNA CLUB.

1. B. Laws	269
2. A. Jansen	268
3. C. Cosens	265
4. S. Whitehead	228

MARTIN'S PRAIRIE CLUB.

1. O. Walker	269
2. John Ferguson	267
3. W. Matthews	262
4. E. Harrison	250

MISSION CITY CLUB (BARRED ROCKS).

1. G. Noble	264
2. J. Chell	259
3. — Hunter	225
4. M. Collins	223

MISSION CITY CLUB (WHITE WYANDOTTES).

1. F. Appleby	271
2. A. Martin	229
3. E. McRae	225
4. B. Hurd	216

NARAMATA CLUB.

1. W. Rounds	265
2. E. Rayner	263
3. C. Hancock	262
4. C. T. Rayner	261

NEEDLES CLUB.

1. H. Hallbauer	271
2. H. Freeman	269
3. J. Dunn	260
4. N. Shiell	245

NELSON CLUB.

1. H. Duck	271
2. R. Ellwood	266
3. T. Rock	265
4. J. Hume	264

ROBSON CLUB.

1. W. Brown	276
2. C. Truelitt	262
3. M. Quance	261
4. E. Fowler	259

DEPARTMENT OF AGRICULTURE.

SALMON ARM CLUB.

Prize.	Points.
1. A. Wood	270
2. M. West	267
3. D. Bedford	266
4. G. Reynolds	264

SUMMERLAND CLUB.

1. G. Graham	256
2. A. Johnston	231
3. R. Phinney	228
4. A. Munn	227

ROOKE CLUB.

1. M. King	264
2. N. Shawyer	260
3. E. Wilson	258
4. B. Ackeman	257

SCARY CLUB.

1. A. Wall	271
2. L. Poirier	258
3. E. Poirier	257
4. E. Clark	255

TAPPEN CLUB.

1. F. Farrell	270
2. B. Brook	266
3. V. Robinson	265
4. M. Annala	241

WAPTA CLUB.

1. L. Young	231
2. Queenie Johnson	230
3. Erasta Bingham	228
4. C. Croft	225

POTATO COMPETITION.

ARMSTRONG CLUB.

1. C. A. Hayhurst	260
2. Isabella Moore	160½
3. Wilson Cross	163½
4. Lambert Farr	154½

COWICHAN C. CL.

1. H. Fielden	251½
2. Jack Hutchinson	235½
3. L. McKinnon	232
4. Hector Monro	169

DENMAN ISLAND CLUB.

1. Jas. A. Doney	243½
2. Alex. Chalmers	188½
3. Wallace Baikie	183½
4. Jas. Dalziel	180½

PORT C OSE CLUB.

Prize.	Points.
1. Raymond Marmer	202½
2. Eddie Brown	134
3. Murray McKenzie	121½
4. Wm. Assman	110

KELOWNA CLUB.

1. Christine Ferguson	203
2. Pat Taylor	184½
3. Mary Stewart	175½
4. Una De Hart	151½

MALAKWA CLUB.

1. Chris. Mison	244½
2. Mabel Mison	230
3. Uno Sirvis	175½
4. Weston Somerville	170½

NEEDLES CLUB.

1. Fred Shiell	248½
2. Geo. Croft	212½
3. Theresa Gudiet	180
4. Jack Shiell	177½

NELSON CLUB.

1. Thos. Johnston	200
2. Sylvia Muraro	120½
3. Harold Ruley	80½
4. Robert Haggert	88½

SALMON ARM CLUB.

1. Jas. Reynolds	237½
2. Geo. Sinclair	210
3. Lillian Smith	95
4. Oscar Eckland	92

SILVER CREEK CLUB.

1. Darwin Thompson	270
2. Neil Campbell	238½
3. Donald Wright	224½
4. P. E. Woodbridge	221½

SUMMERLAND CLUB.

1. Ruth Graham	263½
2. Merle Smith	256½
3. Verna Smith	250
4. John Denike	248

TAPPEN CLUB.

1. Edna Brooke	229½
2. Cecil Brooke	212
3. May Fox	170
4. Freda Fox	153½

PIG-RAISING COMPETITION.

CRAWFORD BAY CLUB.

Prize.	Points.
1. Edith Mawdsley	270
2. Dorothy Dee	269½
3. Charlie Mear	268½
4. George McGregor	266¾

DENMAN ISLAND CLUB.

1. Wilson Doney	264½
2. Ruby Piercy	259¼
3. Vetra Piercy	258¾
4. Eunice Baikie	253

SALMON ARM CLUB.

1. John Honey	265¼
2. Eric Wright	266

Sooke and Milne's Landing Club.

1. Florence Muir	260
2. Violet Doran	257¼
3. Emma McIntosh	240
4. Thos. Seward	190

VERNON CLUB.

1. Hector Richmond	271¼
2. C. Richards	267
3. Eldon Campbell	264½
4. Roy Campbell	260¾

CALF-RAISING COMPETITION.

BERESFORD CLUB.

1. Mike Furlak	223½
2. Theresa Furlak	222
3. Horace Barker	207½
4. Roy Jamies	205¼

SALMON ARM CLUB.

1. Annie Owens	266¼
2. Ralph Brookes	263½
3. Thos. Owens	257½
4. Sidney Dollan	249½

PROVINCIAL PRIZE-WINNERS.

	Points scored out of a Possible 300.
Pigs: Hector Richmond, Vernon	271¼
Potatoes: Darwin Thompson, Salmon Arm	276
Poultry: W. Brown, Robson	276
Calves: Annie Owens, Salmon Arm	266¼

These four prize-winners have the choice of one of the following Provincial prizes: (1.) A pure-bred pig of breed chosen by the winner; (2) a pen of pure-bred chickens of breed chosen by the winner; (3) a special set of agricultural reference books.

PROVINCIAL CLUB PRIZE.

For the Boys' and Girls' Club organizing and conducting the most successful competition, a library composed of eight of the best agricultural periodicals, to be circulated among the club members—won by Crawford Bay Boys' and Girls' Club.

PROVINCIAL SEED FAIR WINNERS.

For best 20-lb. lot of seed-potatoes grown by a Boys' and Girls' Club competitor:—

WINNERS AT ARMSTRONG SEED FAIR, 1916.

Prize.	Points.
1. Christine Ferguson, Kelowna	81
2. Darwin Thompson, Salmon Arm	80½
3. Ruth Graham, West Summerland	79

WINNERS AT NEW WESTMINSTER SEED FAIR, 1916.

1. John Hutchinson, Duncan	82
2. A. Doney, Denman Island	75
3. L. McKinnon, Duncan	69

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